What is claimed is:

1. An etching apparatus for etching a substrate comprising:

a first tank including a first etchant;

an etch bath connected to the first tank and receiving the first etchant, the etch bath containing a residual etchant including a diluted etchant and residue material after the substrate is etched with the first etchant;

a second tank receiving the residual etchant from the etch bath and separating the diluted etchant from the residue material;

a connecting passage connecting the first and second tanks for transferring the separated diluted etchant from the second tank to the first tank; and

an outlet pipe attached to the second tank for discharging the residue material.

2. The etching apparatus according to claim 1, wherein the etch bath includes a temperature sensor.

3. The etching apparatus according to claim 1, further comprising:

a rinse bath for cleaning the substrate that is etched in the etch bath; and

a dry bath for drying the substrate that is rinsed at the rinse bath.

4. The etching apparatus according to claim 1, further comprising:

an etching solution source for supplying an etching solution to the first tank; and

a water supply for supplying water to the first tank.

5. The etching apparatus according to claim 4, wherein the first tank includes a first amount of the first etchant of a predetermined concentration from the etching solution, a second amount of the water, and a third amount of the diluted etchant.

6. The etching apparatus according to claim 4, wherein the etching solution includes HF solution.

7. The etching apparatus according to claim 1, wherein the first tank includes a concentration measuring device measuring a concentration of a resultant etchant.

8. The etching apparatus according to claim 1, further comprising a pump connected to the connection passage for pumping the diluted etchant from the second tank to the first tank.

9. The etching apparatus according to claim 1, wherein the outlet pipe is connected to a bottom of the second tank, and the button portion of the second tank has a cone shape.

10. An etching apparatus for etching a substrate with an etchant, comprising:

an etch bath adapted to receive the substrate into the etchant for etching the substrate;

a temperature sensor installed in the etch bath for monitoring a temperature of the etchant while the substrate is etched in the etch bath; and

a control unit for receiving a signal indicating the temperature of the etchant from the temperature sensor and transmitting an etching termination signal to the etch bath when the temperature reaches a predetermined temperature.

11. An etching apparatus for etching a substrate comprising:

a first tank including a first etchant;

an etch bath connected to the first tank for receiving the first etchant and adapted to etch the substrate with the first etchant, the etch both producing a residual etchant including a diluted etchant and residue material as a result of etching the substrate;

a separation tank adapted to receive the residual etchant from the etch bath for separating the diluted etchant from the residue material, the separation tank transferring the separated diluted etchant to the first tank;

a rinse bath for cleaning the substrate that is etched in the etch bath;

a dry bath for drying the substrate that is rinsed at the rinse bath;

a solvent supply source for supplying solvent water to the first tank;

an etching solution source for supplying an etching solution to the first tank; and

a control unit for controlling the etch bath, the rinse bath, the dry bath, the first tank, and the separation tank.

12. An etching apparatus according to claim 11, wherein the control unit controls the etch bath, the rinse bath, the dry bath, the first tank, and the separation tank such that each of the etch bath, the rinse bath, and the dry bath operates a corresponding process with respect to a plurality of substrates at substantially the same time.

13. The etching apparatus according to claim 11, further comprising a temperature sensor installed in the etch bath for monitoring a temperature of the first etchant while the substrate is etched in the etch bath, wherein the control unit receives signals indicating the temperature of the etchant from the temperature sensor and

transmitting an etching termination signal to the etch bath when the temperature reaches a predetermined target temperature to terminate the etching of the substrate.

14. The etching apparatus according to claim 13, wherein the control unit receives signals indicating the temperature of the etchant at start of etching the substrate in the etch bath and processes the signals to derive the predetermined target temperature of the etchant.

15. The etching apparatus according to claim 11, wherein the first tank contains the first etchant of a predetermined concentration from a mixture of the etching solution, the solvent water, and the diluted etchant.

16 The etching apparatus according to claim 11, further including a concentration measuring device installed in the first tank for measuring a concentration of the first etchant.

17. The etching apparatus according to claim 11, wherein the etching solution includes HF solution.

18. The etching apparatus according to claim 11, further comprising a discharging pipe connected to the first tank, the etch bath, the separation tank, and the rinse bath.